



Computer Reference



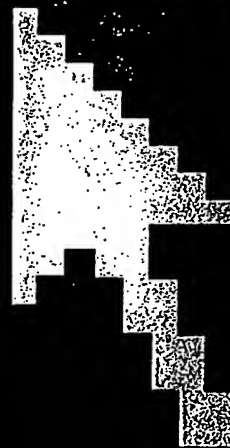
*The Comprehensive Standard for
Business, School, Library, and Home*

**Over
7,600
Terms**

**Additional Terms
Available On Line
Quarterly**

Microsoft Press[®] **Computer Dictionary**

- **Over 300 illustrations and diagrams**
- **Extensive Internet coverage**
- **Featured in Microsoft[®] Bookshelf[®]**
- **Covers software, hardware, concepts,
and more!**



Microsoft Press

BEST AVAILABLE COPY

BEST AVAILABLE COPY

PUBLISHED BY

Microsoft Press
A Division of Microsoft Corporation
One Microsoft Way
Redmond, Washington 98052-6399

Copyright © 1997 by Microsoft Corporation

All rights reserved. No part of the contents of this book may be reproduced or transmitted in any form or by any means without the written permission of the publisher.

Library of Congress Cataloging-in-Publication Data
Microsoft Press Computer Dictionary. -- 3rd ed.

p. cm.

ISBN 1-57231-446-X

1. Computers--Dictionaries. 2. Microcomputers--Dictionaries.

I. Microsoft Press.

QA76.15.M54 1997

004'.03--dc21

97-15489

CIP

Printed and bound in the United States of America.

5 6 7 8 9 QMQM 2 1 0 9 8

Distributed to the book trade in Canada by Macmillan of Canada, a division of Canada Publishing Corporation.

A CIP catalogue record for this book is available from the British Library.

Microsoft Press books are available through booksellers and distributors worldwide. For further information about international editions, contact your local Microsoft Corporation office. Or contact Microsoft Press International directly at fax (425) 936-7329.

Macintosh, Power Macintosh, QuickTime, and TrueType are registered trademarks of Apple Computer, Inc. Intel is a registered trademark of Intel Corporation. DirectInput, DirectX, Microsoft, Microsoft Press, MS-DOS, Visual Basic, Visual C++, Win32, Win32s, Windows, Windows NT, and XENIX are registered trademarks and ActiveMovie, ActiveX, and Visual J++ are trademarks of Microsoft Corporation. Java is a trademark of Sun Microsystems, Inc. Other product and company names mentioned herein may be the trademarks of their respective owners.

Acquisitions Editor: Kim Fryer

Project Editor: Maureen Williams Zimmerman, Anne Taussig

Technical Editors: Dail Magee Jr., Gary Nelson, Jean Ross, Jim Fuchs, John Conrow, Kurt Meyer,
Robert Lyon, Roslyn Lutsch

BEST AVAILABLE COPY

BEST AVAILABLE COPY

of international
strate conven-
data structures,
ice characteris-
standard (defini-

'shən-əl mem'-
dressable by an
perating in real
tes (KB). With-
s, conventional
M accessible to
cted mode, real
nory, extended

A coming to-
etween different
when telephone
converge in the
can also occur
adsheet, when a
edly recalculated
iteration coming

nəl *adj.* Of, per-
: mode of opera-
s, in which the
engage in a dia-
n responses. *See*

on-vər-sā'shə-nəl
n which two or
mit and receive
? *also* interactive

on-vər-sā'shə-nəl
ig language that
t the computer in
sed to more for-
r example, in a
ecute a procedure
am would use the
M CHECK 10

sā'shə-nəl mōd'

The process of
ormat to another;

where information is concerned, a changeover
that affects form but not substance. Types of con-
version include:

- **Data conversion:** Changing the way information is represented—for example, changing binary representation to decimal or hexadecimal.
- **File conversion:** Changing a file from one format to another. Another, more detailed, type of file conversion involves changing character coding from one standard to another, as in converting EBCDIC characters (which are used primarily with mainframe computers) to ASCII characters. *See also* ASCII, EBCDIC.
- **Hardware conversion:** Changing all or part of a computer system to work with new or different devices.
- **Media conversion:** Transferring data from one storage medium to another—for example, from disk to tape or from 3.5-inch Apple Macintosh disk to 5.25-inch MS-DOS disk.
- **Software conversion:** Changing or moving a program designed to run on one computer to run on another. Usually this involves detailed (professional) work on the program itself.
- **System conversion:** Changing from one operating system to another—for example, from MS-DOS to UNIX or OS/2.

conversion table \kən-vər'zhən tā'bl/ *n.* A table, listing a set of characters or numbers and their equivalents in another coding scheme. Common examples of conversion tables include ASCII tables, which list characters and their ASCII values, and decimal-to-hexadecimal tables. Several conversion tables are in Appendixes A–E.

converter \kən-vər'tər/ *n.* Any device that changes electrical signals or computer data from one form to another. For example, an analog-to-digital converter translates analog signals to digital signals.

cookbook¹ \kōbk'hōbk/ *adj.* Of, pertaining to, or characteristic of a book or manual that presents information using a step-by-step approach. For example, a cookbook approach to programming might present a series of sample programs that the reader could analyze and adapt to his or her own needs.

cookbook² \kōbk'hōbk/ *n.* A computer book or manual that presents information using a step-by-step approach. Most often, *cookbook* refers to a programming guide, but it can refer to a book that shows how to accomplish specialized tasks in an application.

cooked mode \kōbkd' mōd/ *n.* One of two forms (the other being raw mode) in which an operating system such as UNIX or MS-DOS "sees" the handle, or identifier, for a character-based device. If the handle is in cooked mode, the operating system stores each character in a buffer and gives special treatment to carriage returns, end-of-file markers, and linefeed and tab characters, sending a line of data to a device, such as the screen, only after it reads a carriage-return or end-of-file character. In cooked mode, characters read from standard input are often automatically echoed (displayed) on the screen. *Compare* raw mode.

cookie \kōbk'ē/ *n.* 1. A block of data that a server returns to a client in response to a request from the client. 2. On the World Wide Web, a block of data that a Web server stores on a client system. When a user returns to the same Web site, the browser sends a copy of the cookie back to the server. Cookies are used to identify users, to instruct the server to send a customized version of the requested Web page, to submit account information for the user, and for other administrative purposes. 3. Originally an allusion to "fortune cookie," a UNIX program that outputs a different message, or "fortune," each time it is used. On some systems, the cookie program is run during user logon.

cookie filtering tool \kōbk'ē fil'tər-ēng tōl/ *n.* A utility that prevents a cookie on a Web browser from relaying information about the user requesting access to a Web site. *See also* cookie (definition 2).

cooperative multitasking \kō-op'ər-ə-tiv mul'tē-ta-skēng, mul'tī-ta-skēng/ *n.* A type of multitasking in which one or more background tasks are given processing time during idle times in the foreground task only if the foreground task allows it. This is the primary mode of multitasking in the Macintosh operating system. *See also* background¹, context switching, foreground¹, multitasking, time slice. *Compare* preemptive multitasking.

manium or sil-
ing the etching
in the surround-
hography.

n. A communi-
re paths to any

nications, a unit
ically from one
contain one or
beginning and
ers, a software-
ldress, type of
ion), and error-
nation. A mes-
om sender to
or it can be
rough a switch-
ie intermediate
hronous trans-
ntrol character
frame (defini-
sage switching,
cket switching,
ftware, a piece
application or
gest an action,
it an event has
rating environ-

ments, such as Microsoft Windows, a unit of infor-
mation passed among running programs, certain
devices in the system, and the operating environ-
ment itself.

message header \mes'əj hed'ər\ *n.* A sequence
of bits or bytes at the beginning of a message that
usually provides a timing sequence and specifies
such aspects of the message structure as its length,
data format, and block identification number. *See*
also header (definition 2).

message of the day \mes'əj əv dhə dā'\ *n.* A
daily bulletin for users of a network, multiuser
computer, or other shared system. In most cases,
users are shown the message of the day when they
log into the system. *Acronym:* MOTD (M'O-T-D').

message queue \mes'əj kyoo'\ *n.* An ordered list
of messages awaiting transmission, from which
they are taken up on a first in, first out (FIFO)
basis.

message reflection \mes'əj rə-flek'shən\ *n.* In
object-oriented programming environments, such
as Visual C++, OLE, and ActiveX, a function that
allows a control to handle its own message. *See*
also ActiveX controls, control (definition 2), OCX,
VBX.

Message Security Protocol \mes'əj se-kyər'i-tē
prō'tə-kol\ *n.* A protocol for Internet messages
that is based on the use of encryption and verifi-
cation to ensure security. It also allows for permis-
sions at the server level for delivery or rejection of
e-mail. *Acronym:* MSP (M'S-P').

message switching \mes'əj swich'ēng\ *n.* A tech-
nique used on some communications networks in
which a message, with appropriate address infor-
mation, is routed through one or more interme-
diate switching stations before being sent to its
destination. On a typical message-switching net-
work, a central computer receives messages,
stores them (usually briefly), determines their des-
tination addresses, and then delivers them. Mes-
sage switching enables a network both to regulate
traffic and to use communications lines efficiently.
Compare circuit switching, packet switching.

messaging \mes'ə-jēng\ *n.* The use of comput-
ers and data communication equipment to con-
vey messages from one person to another, as by
e-mail, voice mail, or fax.

messaging application \mes'ə-jēng ə-plə-kā'shən\
n. An application that enables users to send mes-
sages (such as e-mail or fax) to each other.

**Messaging Application Programming Inter-
face** \mes'ə-jēng ə-plə-kā'shən prō'gram-ēng
in'tər-fās\ *n.* *See* MAPI.

messaging client \mes'ə-jēng klī'ənt\ *n.* An
application program that enables its user to send
or receive messages (such as e-mail or fax) to and
from other users with the help of a remote server.

metacharacter \met'ə-kār'ək-tər\ *n.* A character
embedded in a program source or a data stream
that conveys information about other characters,
rather than itself representing a character. A simple
example is the backslash (\) character, which,
when used in strings in the C programming lan-
guage, indicates that the letter following the back-
slash is part of an escape sequence that enables C
to display a nongraphic character. *See also* escape
character.

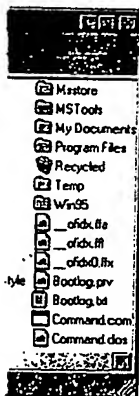
metacompiler \met'ə-kəm-pī'lər\ *n.* A compiler
that produces compilers. The UNIX utility yacc
(Yet Another Compiler-Compiler) is a metacom-
piler. If it is given a language specification, yacc
produces a compiler for that language. *See also*
compiler (definition 2).

Meta-Content Format \met'ə-kon'tent fōr'mat\
n. An open format for describing information
about content of a structured body of data such as
a Web page, a set of files on a Windows desktop,
or a relational database. Meta-Content Format
might be used for indexes, data dictionaries, or
price lists. *Acronym:* MCF (M'C-F').

meta data or metadata \met'ə dā'tə, dat'ə\ *n.*
Data about data. For example, the title, subject,
author, and size of a file constitute meta data
about the file. *See also* data dictionary, reposi-
tory.

Metadata Interchange Specification \met'ə-
dā'tə in'tər-chānj spes-ə-fə-kā'shən\ *n.* A set of
specifications dealing with the exchanging, shar-
ing, and managing of meta data. *Acronym:* MDIS
(M'D-I-S'). *See also* meta data.

metafile \met'ə-fīl\ *n.* A file that contains or
defines other files. Many operating systems use
metafiles to contain directory information about
other files on a given storage device.



How the Internet Works, Millennium Edition Copyright© 1999 by Que®

Executive Editor	Greg Wiegand
Acquisitions Editor	Stephanie J. McComb
Development Editor	Nicholas Goetz
Managing Editor	Thomas F. Hayes
Project Editor	Karen S. Shields
Copy Editor	Kay Hoskin
Indexer	Christine Nelsen
Proofreader	Maribeth Echard
Technical Editor	Bill Bruns
Illustrators	Sarah Ishida, Mina Reimer, Stephen Adams, and Shelley Norris
Book Designers	Carrie English and Bruce Lundquist
Copy Writer	Eric Borgert
Layout Technicians	Lisa England, Cyndi Davis-Hubler

All rights reserved. No part of this book shall be reproduced, stored in a retrieval system, or transmitted by any means, electronic, mechanical, photocopying, recording, or otherwise, without written permission from the publisher. No patent liability is assumed with respect to the use of the information contained herein. Although every precaution has been taken in the preparation of this book, the publisher and author assume no responsibility for errors or omissions. Neither is any liability assumed for damages resulting from the use of the information contained herein.

International Standard Book Number: 0-7897-2132-5

Library of Congress Catalog Card Number: 99-63011

Printed in the United States of America

First Printing: August 1999

01 00

This book was produced digitally by Macmillan Computer Publishing and manufactured using computer-to-plate technology (a filmless process) by GAC, Indianapolis, Indiana.

Trademarks

All terms mentioned in this book that are known to be trademarks or service marks have been appropriately capitalized. Que cannot attest to the accuracy of this information. Use of a term in this book should not be regarded as affecting the validity of any trademark or service mark.

Warning and Disclaimer

Every effort has been made to make this book as complete and as accurate as possible, but no warranty or fitness is implied. The information provided is on an "as is" basis. The authors and the publisher shall have neither liability nor responsibility to any person or entity with respect to any loss or damages arising from the information contained in this book.

BEST AVAILABLE COPY

BEST AVAILABLE COPY